



FIG.2A

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1	GCC	CGC	GAG	AGA	AAA	TGG	CGG	CGG	CGG	CGG
1	CGG	GCG	CTC	TCT	TTT	ACC	GCC	GCC	GCC	GCC
31	GCG	ATC	GCG	CCT	CGT	CGT	CGG	GAT	TCC	CGG
31	CGC	TAG	CGC	GGA	GCA	GCA	GCC	CTA	AGG	GCC
61	GCG	CCG	CGG	CGG	CGA	GTC	CCG	AGG	CGG	GCG
61	CGC	GGC	GCC	GCC	GCT	CAG	GGC	TCC	GCC	CGC
91	GCG	GCG	GCG	GAG	GAG	GAG	GAG	CTC	TCC	AGG
91	CGC	CGC	CGC	CTC	CTC	CTC	CTC	GAG	AGG	TCC
121	GAA	GCG	GCG	CGC	CCG	CAG	CGG	GCG	CGG	CGG
121	CTT	CGC	CGC	GCG	GGC	GTC	GCC	CGC	GCC	GCC
151	GGC	TGC	TGC	GGG	AGC	CTG	GCA	GCG	CGG	GCC
151	CCG	ACG	ACG	CCC	TCG	GAC	CGT	CGC	GCC	CGG
181	GCG	AGC	GCG	CGG	ACT	GGC	GGC	GGC	GGC	ACG
181	CGC	TCG	CGC	GCC	TGA	CCG	CCG	CCG	CCG	TGC
211	TGC	GCA	AAG	TGC	GGA	GTG	TGG	AGC	TGG	ACC
211	ACG	CGT	TTC	ACG	CCT	CAC	ACC	TCG	ACC	TGG
241	AGC	TGC	CGG	AGC	AGC	CGC	TCT	TCC	TCG	CCG
241	TCG	ACG	GCC	TCG	TCG	GCG	AGA	AGG	AGC	GGC
271	CCG	CCT	CGC	CGC	CCT	GCC	CAT	CTA	CTT	CCC
271	GGC	GGA	GCG	GCG	GGA	CGG	GTA	GAT	GAA	GGG
301	CGT	CGC	CGG	AGC	CCG	CGG	ACG	CGG	CTG	CAG
301	GCA	GCG	GCC	TCG	GGC	GCC	TGC	GCC	GAC	GTC
331	GAG	CGA	GTC	GCT	TCC	AGC	CCG	CGG	CGG	GAC
331	CTC	GCT	CAG	CGA	AGG	TCG	GGC	GCC	GCC	CTG
361	CGC	CAC	CCC	CGG	GAG	CGG	CGA	GTC	GCT	GCG
361	GCG	GTG	GGG	GCC	CTC	GCC	GCT	CAG	CGA	CGC
391	GCT	CCC	ACT	CTG	CCG	AGC	TGG	CGG	CCG	CGC
391	CGA	GGG	TGA	GAC	GGC	TCG	ACC	GCC	GGC	GCG
421	GGG	ACA	GCG	GCG	CCC	GGA	GCC	CCG	CGG	GGG
421	CCC	TGT	CGC	CGC	GGG	CCT	CGG	GGC	GCC	CCC
451	CGG	AGC	CGC	CCT	CTG	CAG	CGG	CCC	CCT	CCG
451	GCC	TCG	GCG	GGA	GAC	GTC	GCC	GGG	GGA	GGC
481	GTC	GAG	AGA	TGG	AGA	ATA	AAG	AAA	CCC	TCA
481	CAG	CTC	TCT	ACC	TCT	TAT	TTC	TTT	GGG	AGT
511	AAG	GAC	TGC	ACA	AGA	TGG	AGG	ATC	GCC	CGG
511	TTC	CTG	ACG	TGT	TCT	ACC	TCC	TAG	CGG	GCC

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FIG.2B

541 AGG AGA GAA TGA TCC GGG AGA AGC TCA AGG
541 TCC TCT CTT ACT AGG CCC TCT TCG AGT TCC
571 CGA CCT GTA TGC CGG CCT GGA AGC ACG AGT
571 GCT GGA CAT ACG GCC GGA CCT TCG TGC TCA
601 GGT TGG AGA GGA GGA ACA GGA GAG GCC CTG
601 CCA ACC TCT CCT CCT TGT CCT CTC CGG GAC
631 TGG TGG TGA AGC CAA TCC CTA TTA AAG GAG
631 ACC ACC ACT TCG GTT AGG GAT AAT TTC CTC
661 ATG GAT CTG AAG TGA ATA ACT TGG CAG CTG
661 TAC CTA GAC TTC ACT TAT TGA ACC GTC GAC
691 AGC CCC AGG GAG AGG GCC AGG CAG GTT CCG
691 TCG GGG TCC CTC TCC CGG TCC GTC CAA GGC
721 CTG CAC CAG CCC CCA AGG GCC GAC GAA GCC
721 GAC GTG GTC GGG GGT TCC CGG CTG CTT CGG
751 CAT CTC CTG GCA GCT CTC CGT CAG GGC GCT
751 GTA GAG GAC CGT CGA GAG GCA GTC CCG CGA
781 CGG TGA AGC CGG AAT CCC CAG GAG TAA GAC
781 GCC ACT TCG GCC TTA GGG GTC CTC ATT CTG
811 GGA AAC GAG TGT CCC CGG TGC CTT TCC AGA
811 CCT TTG CTC ACA GGG GCC ACG GAA AGG TCT
841 GTG GCA GAA TCA CAC CAC CCC GAA GAG CCC
841 CAC CGT CTT AGT GTG GTG GGG CTT CTC GGG
871 CAT CAC CGG ATG GCT TCT CCC CGT ACA GCC
871 GTA GTG GCC TAC CGA AGA GGG GCA TGT CGG
901 CAG AGG AGA CGA GCC GCC GCG TGA ACA AAG
901 GTC TCC TCT GCT CGG CGG CGC ACT TGT TTC
931 TGA TGA GAG CCA GGC TGT ACC TGC TGC AGC
931 ACT ACT CTC GGT CCG ACA TGG ACG ACG TCG
961 AGA TAG GAC CCA ACT CTT TCC TGA TTG GAG
961 TCT ATC CTG GGT TGA GAA AGG ACT AAC CTC
991 GAG ACA GTC CAG ACA ATA AAT ACC GGG TGT
991 CTC TGT CAG GTC TGT TAT TTA TGG CCC ACA
1021 TTA TTG GGC CAC AGA ACT GCA GCT GTG GGC
1021 AAT AAC CCG GTG TCT TGA CGT CGA CAC CCG
1051 GTG GAG CAT TCT GTA TTC ACC TCT TGT TTG
1051 CAC CTC GTA AGA CAT AAG TGG AGA ACA AAC

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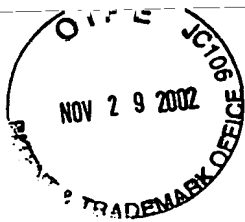


FIG.2C

1081	TCA	TGC	TCC	GGG	TGT	TTC	AGC	TAG	AAC	CCT
1081	AGT	ACG	AGG	CCC	ACA	AAG	TCG	ATC	TTG	GGA
1111	CTG	ACC	CCA	TGT	TAT	GGA	GAA	AAA	CTT	TAA
1111	GAC	TGG	GGT	ACA	ATA	CCT	CTT	TTT	GAA	ATT
1141	AAA	ATT	TCG	AGG	TTG	AGA	GTT	TGT	TCC	AGA
1141	TTT	TAA	AGC	TCC	AAC	TCT	CAA	ACA	AGG	TCT
1171	AAT	ACC	ACA	GTA	GGC	GTA	GCT	CGA	GAA	TCA
1171	TTA	TGG	TGT	CAT	CCG	CAT	CGA	GCT	CTT	AGT
1201	AAG	CTC	CAT	CCC	GGA	ACA	CCA	TCC	AGA	AGT
1201	TTC	GAG	GTA	GGG	CCT	TGT	GGT	AGG	TCT	TCA
1231	TTG	TGT	CAC	GCA	TGT	CAA	ATT	CTC	ACA	CAC
1231	AAC	ACA	GTG	CGT	ACA	GTT	TAA	GAG	TGT	GTG
1261	TGT	CAT	CGT	CTA	GCA	CAT	CCA	CAT	CTA	GTT
1261	ACA	GTA	GCA	GAT	CGT	GTA	GGT	GTA	GAT	CAA
1291	CAG	AAA	ACA	GCA	TCA	AGG	ATG	AAG	AGG	AGC
1291	GTC	TTT	TGT	CGT	AGT	TCC	TAC	TTC	TCC	TCG
1321	AGA	TGT	GTC	CCA	TCT	GCT	TGC	TGG	GCA	TGC
1321	TCT	ACA	CAG	GGT	AGA	CGA	ACG	ACC	CGT	ACG
1351	TGG	ATG	AGG	AGA	GCC	TGA	CTG	TGT	GTG	AAG
1351	ACC	TAC	TCC	TCT	CGG	ACT	GAC	ACA	CAC	TTC
1381	ATG	GCT	GCA	GGA	ACA	AGC	TGC	ACC	ACC	ATT
1381	TAC	CGA	CGT	CCT	TGT	TCG	ACG	TGG	TGG	TAA
1411	GCA	TGT	CCA	TCT	GGG	CGG	AAG	AGT	GTA	GAA
1411	CGT	ACA	GGT	AGA	CCC	GCC	TTC	TCA	CAT	CTT
1441	GAA	ATA	GAG	AGC	CTT	TAA	TAT	GTC	CCC	TTT
1441	CTT	TAT	CTC	TCG	GAA	ATT	ATA	CAG	GGG	AAA
1471	GTA	GAT	CTA	AGT	GGA	GAT	CCC	ATG	ACT	TCT
1471	CAT	CTA	GAT	TCA	CCT	CTA	GGG	TAC	TGA	AGA
1501	ACA	GCC	ATG	AGT	TAT	CAA	GCC	CCG	TGG	AGT
1501	TGT	CGG	TAC	TCA	ATA	GTT	CGG	GGC	ACC	TCA
1531	CCC	CCG	CCT	CCC	TGC	GAG	CTG	TCC	AGC	AGC
1531	GGG	GGC	GGA	GGG	ACG	CTC	GAC	AGG	TCG	TCG
1561	CAT	CCT	CCC	CGC	AGC	AGC	CCG	TGG	CCG	GAT
1561	GTA	GGA	GGG	GCG	TCG	TCG	GGC	ACC	GGC	CTA
1591	CAC	AGC	GGA	GGA	ATC	AGG	AGA	GCA	GTT	TTA
1591	GTG	TCG	CCT	CCT	TAG	TCC	TCT	CGT	CAA	AAT

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FIG.2D

1621	ACC	TTA	CTC	ATT	TTG	GAA	CCC	AGC	AGA	TTC
1621	TGG	AAT	GAG	TAA	AAC	CTT	GGG	TCG	TCT	AAG
1651	CTT	CCG	CTT	ACA	AAG	ATT	TGG	CCG	AGC	CAT
1651	GAA	GGC	GAA	TGT	TTC	TAA	ACC	GGC	TCG	GTA
1681	GGA	TTC	AGG	TGT	TTG	GAA	TGG	AAC	TCG	TTG
1681	CCT	AAG	TCC	ACA	AAC	CTT	ACC	TTG	AGC	AAC
1711	GCT	GCT	TAT	TCT	CTA	GAA	ACT	GGA	ACG	TAA
1711	CGA	CGA	ATA	AGA	GAT	CTT	TGA	CCT	TGC	ATT
1741	GGG	AAA	TGG	CCC	TTA	GGC	GTC	TTT	CCC	ACG
1741	CCC	TTT	ACC	GGG	AAT	CCG	CAG	AAA	GGG	TGC
1771	ACG	TTA	GTG	GGG	CCC	TGT	TGT	TGG	CAA	ACG
1771	TGC	AAT	CAC	CCC	GGG	ACA	ACA	ACC	GTT	TGC
1801	GGG	AGA	GCA	CTG	GAA	ACT	CTG	GAG	GCG	GCA
1801	CCC	TCT	CGT	GAC	CTT	TGA	GAC	CTC	CGC	CGT
1831	GTG	GGG	GCA	GCT	TAA	GCG	CGG	GAG	CGG	CCA
1831	CAC	CCC	CGT	CGA	ATT	CGC	GCC	CTC	GCC	GGT
1861	GCG	GGT	CCT	CCC	AGC	CCA	GCA	TCT	CAG	GGG
1861	CGC	CCA	GGA	GGG	TCG	GGT	CGT	AGA	GTC	CCC
1891	ATG	TGG	TGG	AGG	CGT	GCT	GCA	GTG	TCC	TGT
1891	TAC	ACC	ACC	TCC	GCA	CGA	CGT	CAC	AGG	ACA
1921	CTA	TAG	TCT	GCG	CTG	ACC	CTG	TCT	ACA	AAG
1921	GAT	ATC	AGA	CGC	GAC	TGG	GAC	AGA	TGT	TTC
1951	TGT	ACG	TTG	CTG	CTT	TAA	AAA	CAT	TGA	GAG
1951	ACA	TGC	AAC	GAC	GAA	ATT	TTT	GTA	ACT	CTC
1981	CCA	TGC	TGG	TAT	ACA	CTC	CTT	GCC	ACA	GTC
1981	GGT	ACG	ACC	ATA	TGT	GAG	GAA	CGG	TGT	CAG
2011	TGG	CAG	AAA	GAA	TCA	AAC	TTC	AGA	GAC	TCC
2011	ACC	GTC	TTT	CTT	AGT	TTG	AAG	TCT	CTG	AGG
2041	TCC	GGC	CAG	TTG	TAG	ACA	CTA	TCC	TTG	TCA
2041	AGG	CCG	GTC	AAC	ATC	TGT	GAT	AGG	AAC	AGT
2071	AGT	GTG	CAG	ATG	CCA	ACA	GCC	GCA	CGA	GTC
2071	TCA	CAC	GTC	TAC	GGT	TGT	CGG	CGT	GCT	CAG
2101	AGC	TGT	CCA	TAT	CTA	CAG	TGC	TGG	AAC	TCT
2101	TCG	ACA	GGT	ATA	GAT	GTC	ACG	ACC	TTG	AGA
2131	GCA	AGG	GCC	AAG	CAG	GAG	AGC	TGG	CGG	TTG
2131	CGT	TCC	CGG	TTC	GTC	CTC	TCG	ACC	GCC	AAC

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FIG.2E

2161 GGA GAG AAA TAC TTA AAG CTG GGT CCA TCG
2161 CCT CTC TTT ATG AAT TTC GAC CCA GGT AGC

2191 GGG TTG GTG GTG TCG ATT ACG TCT TAA GTT
2191 CCC AAC CAC CAC AGC TAA TGC AGA ATT CAA

2221 GTA TCC TTG GAA ACC AAG CTG AAT CAA ACA
2221 CAT AGG AAC CTT TGG TTC GAC TTA GTT TGT

2251 ACT GGC AAG AAC TGC TGG GTC GCC TCT GTC
2251 TGA CCG TTC TTG ACG ACC CAG CGG AGA CAG

2281 TTA TAG ACA GGT TGC TGT TGG AAT TTC CTG
2281 AAT ATC TGT CCA ACG ACA ACC TTA AAG GAC

2311 CTG AAT TCT ATC CTC ATA TTG TCA GTA CTG
2311 GAC TTA AGA TAG GAG TAT AAC AGT CAT GAC

2341 ATG TCT CAC AAG CTG AGC CTG TTG AAA TCA
2341 TAC AGA GTG TTC GAC TCG GAC AAC TTT AGT

2371 GGT ACA AGA AGC TGC TCT CCC TCT TAA CCT
2371 CCA TGT TCT TCG ACG AGA GGG AGA ATT GGA

2401 TTG CCT TGC AAT CCA TTG ACA ATT CCC ACT
2401 AAC GGA ACG TTA GGT AAC TGT TAA GGG TGA

2431 CGA TGG TTG GCA AGC TCT CTC GGA GGA TAT
2431 GCT ACC AAC CGT TCG AGA GAG CCT CCT ATA

2461 ATC TGA GCT CTG CCA GGA TGG TGA CCG CAG
2461 TAG ACT CGA GAC GGT CCT ACC ACT GGC GTC

2491 TGC CCG CTG TGT TTT CCA AGC TGG TAA CCA
2491 ACG GGC GAC ACA AAA GGT TCG ACC ATT GGT

2521 TGC TTA ATG CTT CTG GCT CCA CCC ACT TCA
2521 ACG AAT TAC GAA GAC CGA GGT GGG TGA AGT

2551 CCA GGA TGC GCC GGC GTC TGA TGG CTA TCG
2551 GGT CCT ACG CGG CCG CAG ACT ACC GAT AGC

2581 CGG ATG AGG TAG AAA TTG CCG AGG TCA TCC
2581 GCC TAC TCC ATC TTT AAC GGC TCC AGT AGG

2611 AGC TGG GTG TGG AGG ACA CTG TGG ATG GGC
2611 TCG ACC CAC ACC TCC TGT GAC ACC TAC CCG

2641 ATC AGG ACA GCT TAC AGG CCG TGG CCC CCA
2641 TAG TCC TGT CGA ATG TCC GGC ACC GGG GGT

2671 CCA GCT GTC TAG AAA ACA GCT CCC TTG AGC
2671 GGT CGA CAG ATC TTT TGT CGA GGG AAC TCG

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FIG.2F

2701	ACA	CAG	TCC	ATA	GAG	AGA	AAA	CTG	GAA	AAG
2701	TGT	GTC	AGG	TAT	CTC	TCT	TTT	GAC	CTT	TTC
2731	GAC	TAA	GTG	CTA	CGA	GAC	TGA	GTG	CCA	GCT
2731	CTG	ATT	CAC	GAT	GCT	CTG	ACT	CAC	GGT	CGA
2761	CGG	AGG	ACA	TTT	CTG	ACA	GAC	TGG	CCG	GCG
2761	GCC	TCC	TGT	AAA	GAC	TGT	CTG	ACC	GGC	CGC
2791	TCT	CTG	TAG	GAC	TTC	CCA	GCT	CAA	CAA	CAA
2791	AGA	GAC	ATC	CTG	AAG	GGT	CGA	GTT	GTT	GTT
2821	CAG	AAC	AAC	CAA	AGC	CAG	CGG	TTC	AAA	CAA
2821	GTC	TTG	TTG	GTT	TCG	GTC	GCC	AAG	TTT	GTT
2851	AAG	GCA	GAC	CCC	ACA	GTC	AGT	GTT	TGA	ACT
2851	TTC	CGT	CTG	GGG	TGT	CAG	TCA	CAA	ACT	TGA
2881	CCT	CCC	CTT	TGT	CTC	ATG	CTC	AAT	TAA	TGT
2881	GGA	GGG	GAA	ACA	GAG	TAC	GAG	TTA	ATT	ACA
2911	TCC	CAG	CAC	CAT	CAG	CCC	CTT	GTT	CCT	CTG
2911	AGG	GTC	GTG	GTA	GTC	GGG	GAA	CAA	GGA	GAC
2941	CCC	CGT	CTG	TCC	CAG	ATA	TTT	CTA	AGC	ACA
2941	GGG	GCA	GAC	AGG	GTC	TAT	AAA	GAT	TCG	TGT
2971	GAC	CCC	AGG	CAT	TTG	TTC	CCT	GCA	AAA	TAC
2971	CTG	GGG	TCC	GTA	AAC	AAG	GGA	CGT	TTT	ATG
3001	CTT	CCG	CAT	CTC	CTC	AGA	CAC	AGC	GCA	AGT
3001	GAA	GGC	GTA	GAG	GAG	TCT	GTG	TCG	CGT	TCA
3031	TCT	CTC	TAC	AAT	TCC	AGA	GGA	ACT	GCT	CTG
3031	AGA	GAG	ATG	TTA	AGG	TCT	CCT	TGA	CGA	GAC
3061	AAC	ACC	GAG	ACT	CAG	ACC	AGC	TCT	CCC	CAG
3061	TTG	TGG	CTC	TGA	GTC	TGG	TCG	AGA	GGG	GTC
3091	TCT	TCA	CTC	AGT	CAA	GAC	CCC	CAC	CCT	CCA
3091	AGA	AGT	GAG	TCA	GTT	CTG	GGG	GTG	GGA	GGT
3121	GTA	ACA	TAC	ACA	GGC	CAA	AGC	CAT	CCC	GAC
3121	CAT	TGT	ATG	TGT	CCG	GTT	TCG	GTA	GGG	CTG
3151	CCG	TTC	CGG	GCA	GTA	CAA	GCA	AAC	TAG	GGG
3151	GGC	AAG	GCC	CGT	CAT	GTT	CGT	TTG	ATC	CCC
3181	ACG	CCA	CAA	AAA	GTA	GCA	TGA	CAC	TTG	ATC
3181	TGC	GGT	GTT	TTT	CAT	CGT	ACT	GTG	AAC	TAG
3211	TGG	GCA	GTG	CTT	CCA	GGT	GTG	ACG	ACA	GCT
3211	ACC	CGT	CAC	GAA	GGT	CCA	CAC	TGC	TGT	CGA

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FIG.2G

3241 TTG GCG GCG GCG GCA ACA GTG GCA ACG CCG
3241 AAC CGC CGC CGC CGT TGT CAC CGT TGC GGC

3271 TCA TAC CCA GCG ACG AGA CAG TGT TCA CGC
3271 AGT ATG GGT CGC TGC TCT GTC ACA AGT GCG

3301 CGG TGG AGG ACA AGT GCA GGT TAG ATG TGA
3301 GCC ACC TCC TGT TCA CGT CCA ATC TAC ACT

3331 ACA CCG AGC TCA ACT CCA GCA TCG AGG ACC
3331 TGT GGC TCG AGT TGA GGT CGT AGC TCC TGG

3361 TTC TTG AAG CAT CCA TGC CTT CAA GTG ACA
3361 AAG AAC TTC GTA GGT ACG GAA GTT CAC TGT

3391 CGA CAG TCA CTT TCA AGT CCG AAG TCG CCG
3391 GCT GTC AGT GAA AGT TCA GGC TTC AGC GGC

3421 TCC TCT CTC CGG AAA AGG CCG AAA ATG ACG
3421 AGG AGA GAG GCC TTT TCC GGC TTT TAC TGC

3451 ACA CCT ACA AAG ACG ACG TCA ATC ATA ATC
3451 TGT GGA TGT TTC TGC TGC AGT TAG TAT TAG

3481 AAA AGT GCA AAG AAA AGA TGG AAG CTG AAG
3481 TTT TCA CGT TTC TTT TCT ACC TTC GAC TTC

3511 AGG AGG AGG CTT TAG CGA TCG CCA TGG CGA
3511 TCC TCC TCC GAA ATC GCT AGC GGT ACC GCT

3541 TGT CAG CGT CTC AGG ATG CCC TCC CCA TCG
3541 ACA GTC GCA GAG TCC TAC GGG AGG GGT AGC

3571 TCC CTC AGC TGC AGG TGG AAA ATG GAG AAG
3571 AGG GAG TCG ACG TCC ACC TTT TAC CTC TTC

3601 ATA TTA TCA TCA TTC AGC AGG ACA CAC CAG
3601 TAT AAT AGT AGT AAG TCG TCC TGT GTG GTC

3631 AAA CTC TTC CAG GAC ATA CCA AAG CGA AAC
3631 TTT GAG AAG GTC CTG TAT GGT TTC GCT TTG

3661 AGC CTT ACA GAG AAG ACG CTG AGT GGC TGA
3661 TCG GAA TGT CTC TTC TGC GAC TCA CCG ACT

3691 AAG GCC AGC AGA TAG GCC TCG GAG CAT TTT
3691 TTC CGG TCG TCT ATC CGG AGC CTC GTA AAA

3721 CTT CCT GTT ACC AAG CAC AGG ATG TGG GGA
3721 GAA GGA CAA TGG TTC GTG TCC TAC ACC CCT

3751 CTG GGA CTT TAA TGG CTG TGA AAC AGG TGA
3751 GAC CCT GAA ATT ACC GAC ACT TTG TCC ACT

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FIG.2H

3781 CGT ACG TCA GAA ACA CAT CCT CCG AGC AGG
3781 GCA TGC AGT CTT TGT GTA GGA GGC TCG TCC

3811 AGG AGG TGG TGG AAG CGT TGA GGG AAG AGA
3811 TCC TCC ACC ACC TTC GCA ACT CCC TTC TCT

3841 TCC GGA TGA TGG GTC ACC TCA ACC ATC CAA
3841 AGG CCT ACT ACC CAG TGG AGT TGG TAG GTT

3871 ACA TCA TCC GGA TGC TGG GGG CCA CGT GCG
3871 TGT AGT AGG CCT ACG ACC CCC GGT GCA CGC

3901 AGA AGA GCA ACT ACA ACC TCT TCA TTG AGT
3901 TCT TCT CGT TGA TGT TGG AGA AGT AAC TCA

3931 GGA TGG CGG GAG GAT CTG TGG CTC ACC TCT
3931 CCT ACC GCC CTC CTA GAC ACC GAG TGG AGA

3961 TGA GTA AAT ACG GAG CTT TCA AGG AGT CAG
3961 ACT CAT TTA TGC CTC GAA AGT TCC TCA GTC

3991 TCG TCA TTA ACT ACA CTG AGC AGT TAC TGC
3991 AGC AGT AAT TGA TGT GAC TCG TCA ATG ACG

4021 GTG GCC TTT CCT ATC TCC ACG AGA ACC AGA
4021 CAC CGG AAA GGA TAG AGG TGC TCT TGG TCT

4051 TCA TTC ACA GAG ACG TCA AAG GTG CCA ACC
4051 AGT AAG TGT CTC TGC AGT TTC CAC GGT TGG

4081 TGC TCA TTG ACA GCA CCG GTC AGA GGC TGA
4081 ACG AGT AAC TGT CGT GGC CAG TCT CCG ACT

4111 GAA TTG CAG ACT TTG GAG CTG CTG CCA GGT
4111 CTT AAC GTC TGA AAC CTC GAC GAC GGT CCA

4141 TGG CAT CAA AAG GAA CCG GTG CAG GAG AGT
4141 ACC GTA GTT TTC CTT GGC CAC GTC CTC TCA

4171 TCC AGG GAC AGT TAC TGG GGA CAA TTG CAT
4171 AGG TCC CTG TCA ATG ACC CCT GTT AAC GTA

4201 TCA TGG CGC CTG AGG TCC TAA GAG GTC AGC
4201 AGT ACC GCG GAC TCC AGG ATT CTC CAG TCG

4231 AGT ATG GTA GGA GCT GTG ATG TAT GGA GTG
4231 TCA TAC CAT CCT CGA CAC TAC ATA CCT CAC

4261 TTG GCT GCG CCA TTA TAG AAA TGG CTT GTG
4261 AAC CGA CGC GGT AAT ATC TTT ACC GAA CAC

4291 CAA AAC CAC CTT GGA ATG CAG AAA AAC ACT
4291 GTT TTG GTG GAA CCT TAC GTC TTT TTG TGA

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FIG.21

4321	CCA	ATC	ATC	TCG	CCT	TGA	TAT	TTA	AGA	TTG
4321	GGT	TAG	TAG	AGC	GGA	ACT	ATA	AAT	TCT	AAC
4351	CTA	GCG	CAA	CTA	CTG	CAC	CGT	CCA	TCC	CGT
4351	GAT	CGC	GTT	GAT	GAC	GTG	GCA	GGT	AGG	GCA
4381	CAC	ACC	TGT	CCC	CGG	GTC	TGC	GCG	ACG	TGG
4381	GTG	TGG	ACA	GGG	GCC	CAG	ACG	CGC	TGC	ACC
4411	CCG	TGC	GCT	GCT	TAG	AAC	TTC	AGC	CTC	AGG
4411	GGC	ACG	CGA	CGA	ATC	TTG	AAG	TCG	GAG	TCC
4441	ACC	GGC	CTC	CGT	CCA	GAG	AGC	TGC	TGA	AAC
4441	TGG	CCG	GAG	GCA	GGT	CTC	TCG	ACG	ACT	TTG
4471	ATC	CGG	TCT	TCC	GTA	CCA	CGT	GGT	AGT	TAA
4471	TAG	GCC	AGA	AGG	CAT	GGT	GCA	CCA	TCA	ATT
4501	TTG	TTC	AGA	TCA	GCT	CTA	ATG	GAG	ACA	GGA
4501	AAC	AAG	TCT	AGT	CGA	GAT	TAC	CTC	TGT	CCT
4531	TAT	GCA	ACC	GGG	AGA	GAG	AAA	AGA	GAA	CTT
4531	ATA	CGT	TGG	CCC	TCT	CTC	TTT	TCT	CTT	GAA
4561	GTG	GGC	GAC	CAT	GCC	GCT	AAC	CGC	AGC	CCT
4561	CAC	CCG	CTG	GTA	CGG	CGA	TTG	GCG	TCG	GGA
4591	CAC	GCC	ACT	GAA	CAG	CCA	GAA	ACG	GGG	CCA
4591	GTG	CGG	TGA	CTT	GTC	GGT	CTT	TGC	CCC	GGT
4621	GCG	GGG	AAC	CGT	ACC	TAA	GCA	TGT	GAT	TGA
4621	CGC	CCC	TTG	GCA	TGG	ATT	CGT	ACA	CTA	ACT
4651	CAA	ATC	ATG	ACC	TGT	ACC	TAA	GCT	CGA	TAT
4651	GTT	TAG	TAC	TGG	ACA	TGG	ATT	CGA	GCT	ATA
4681	GCA	GAC	ATC	TAC	AGC	TCG	TGC	AGG	AAC	TGC
4681	CGT	CTG	TAG	ATG	TCG	AGC	ACG	TCC	TTG	ACG
4711	ACA	CCG	TGC	CTT	TCA	CAG	GAC	TGG	CTC	TGG
4711	TGT	GGC	ACG	GAA	AGT	GTC	CTG	ACC	GAG	ACC
4741	GGG	ACC	AGG	AAG	GCG	ATG	GAG	TTT	GCA	TGA
4741	CCC	TGG	TCC	TTC	CGC	TAC	CTC	AAA	CGT	ACT
4771	CTA	AAG	AAC	AGA	AGC	ATA	AAT	TTA	TTT	TTG
4771	GAT	TTC	TTG	TCT	TCG	TAT	TTA	AAT	AAA	AAC
4801	GAG	CAC	TTT	TTC	AGC	TAA	TCA	GTA	TTA	CCA
4801	CTC	GTG	AAA	AAG	TCG	ATT	AGT	CAT	AAT	GGT
4831	TGT	ACA	TCA	ACA	TGC	CCG	CCA	CAT	TTC	AAA
4831	ACA	TGT	AGT	TGT	ACG	GGC	GGT	GTA	AAG	TTT

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FIG.2J

4861 CTC AGA CTG TCC CAG ATG TCA AGA TCC ACT
4861 GAG TCT GAC AGG GTC TAC AGT TCT AGG TGA

4891 GTG TTT GAG TTT GTT TGC AGT TCC CTC AGC
4891 CAC AAA CTC AAA CAA ACG TCA AGG GAG TCG

4921 TTG CTG GTA ATT GTG GTG TTT TGT TTT CGA
4921 AAC GAC CAT TAA CAC CAC AAA ACA AAA GCT

4951 TGC AAA TGT GAT GTA ATA TTC TTA TTT TCT
4951 ACG TTT ACA CTA CAT TAT AAG AAT AAA AGA

4981 TTG GAT CAA AGC TGG ACT GAA AAT TGT ACT
4981 AAC CTA GTT TCG ACC TGA CTT TTA ACA TGA

5011 GTG TAA TTA TTT TTG TGT TTT TAA TGT TAT
5011 CAC ATT AAT AAA AAC ACA AAA ATT ACA ATA

5041 TTG GTA CTC GAA TTG TAA ATA ACG TCT ACT
5041 AAC CAT GAG CTT AAC ATT TAT TGC AGA TGA

5071 GCT GTT TAT TCC AGT TTC TAC TAC CTC AGG
5071 CGA CAA ATA AGG TCA AAG ATG ATG GAG TCC

5101 TGT CCT ATA GAT TTT TCT TCT ACC AAA GTT
5101 ACA GGA TAT CTA AAA AGA AGA TGG TTT CAA

5131 CAC TCT CAG AAT GAA ATT CTA CGT GCT GTG
5131 GTG AGA GTC TTA CTT TAA GAT GCA CGA CAC

5161 TGA CTA TGA CTC CTA AGA CTT CCA GGG CTT
5161 ACT GAT ACT GAG GAT TCT GAA GGT CCC GAA

5191 AAG GGC TAA CTC CTA TTA GCA CCT TAC TAT
5191 TTC CCG ATT GAG GAT AAT CGT GGA ATG ATA

5221 GTA AGC AAA TGC TAC AAA AAA AAA AAA AAA
5221 CAT TCG TTT ACG ATG TTT TTT TTT TTT TTT

5251 AAA
5251 TTT

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FIG.3A

mouse	1	10	20	30	40
human	MAAAAGDRAS	SSGFPGAAAA	SPEAGGGGGG	GGALQGS GAP	AAGAAGLLRE
mouse	50	60	70	80	90
human	PGSAGRERAD	WRRRQLRKVR	SVELDQLPEQ	PLFLAAASPP	CPSTSPSPPEP
mouse	100	110	120	130	140
human	ADAAAGASRF	QPAAGPPPPG	AASRCGSHSA	ELAAARDSGA	RSPAGAEPPS
mouse	150	160	170	180	190
human	AAAPSGREME	NKETLKGLHK	MEDRPEERMI	REKLKATCMP	AWKHEWLERR AWKHEWLERR
mouse	200	210	220	230	240
human	NRRGPVVVKP	IP <u>IK</u> KG DGSEV	NNLAAE <u>PQ</u> GE	<u>GQAGSA</u> APAP	KGRRSPSPGS
	NRRGPVVVKP	IP <u>VK</u> KG DGSEM	NHLAAE <u>SP</u> GE	<u>VQASAAS</u> PAS	KGRRSPSPGN
mouse	250	260	270	280	290
human	SPSGR <u>SVK</u> PE	SPGVRRKRVS	PVPFQSGRIT	PPRRAPSPDG	FSPYSPEETS
	SPSGR <u>TVK</u> SE	SPGVRRKRVS	PVPFQSGRIT	PPRRAPSPDG	FSPYSPEETN
mouse	300	310	320	330	340
human	RRVNKVMRAR	LYLLQQIGPN	SFLIGGDSPD	NKYRVFIGPQ	NCSC <u>GRGA</u> FC
	RRVNKVMRAR	LYLLQQIGPN	SFLIGGDSPD	NKYRVFIGPQ	NCSC <u>ARGT</u> FC
mouse	350	360	370	380	390
human	IHLLFVMLRV	FQLEPSDPML	WRKTLKNFEV	ESLFQKYHSR	RSSRIKAPSR
	IHLLFVMLRV	FQLEPSDPML	WRKTLKNFEV	ESLFQKYHSR	RSSRIKAPSR
mouse	400	410	420	430	440
human	NTIQKFVSRM	SNSHTLSSSS	TSTSSS <u>EN</u> SI	KDEEEQMCPI	CLLGMLDEES
	NTIQKFVSRM	SNSHTLSSSS	TSTSSS <u>VN</u> SI	KDEEEQMCPI	CLLGMLDEES
mouse	450	460	470	480	490
human	LTVCEDGCRN	KLHHHCMSIW	AEECRNREP	LICPLCRSKW	RSHDFYSHEL
	LTVCEDGCRN	KLHHHCMSIW	AEECRNREP	LICPLCRSKW	RSHDFYSHEL
mouse	500	510	520	530	540
human	SSPV <u>ES</u> PASL	RAV <u>QQPSS</u> PQ	QP <u>VAGS</u> QRN	QES <u>SFNLTH</u> F	GTQQIP <u>S</u> AYK
	SSPV <u>DSP</u> SSL	RAA <u>QQQT</u> VQO	QP <u>L</u> AGS-RRN	QES <u>NFNLTH</u> Y	GTQQIP <u>P</u> AYK
mouse	550	560	570	580	590
human	DLAEPWIQVF	GMELVGCLFS	RNWNVREMA	RRLSHDVSGA	LLLANGESTG
	DLAEPWIQVF	GMELVGCLFS	RNWNVREMA	RRLSHDVSGA	LLLANGESTG
mouse	600	610	620	630	640
human	NSGGSGGSL	SAGAASGSSQ	PSISGDVVEA	CCSVLSIVCA	DPVKVYVAA
	NSGGSGGSL	SAGAASGSSQ	PSISGDVVEA	CCSVLSIVCA	DPVKVYVAA

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FIG.3B

	650	660	670	680	690
mouse	LKTLRAMLVY	TPCHSLAERI	KLQRLLRPVV	DTILVKCADA	NSRTSQLSIS
human	LKTLRAMLVY	TPCHSLAERI	KLQRLLRPVV	DTILVKCADA	NSRTSQLSIS
	700	710	720	730	740
mouse	TVLELC <u>K</u> GQA	GE <u>L</u> AVGREIL	KAGSIGVGGV	DYVLSCILGN	QAESNNWQEL
human	TVLELC <u>N</u> GQA	G <u>K</u> LAVGREIL	KAGSIGVGGV	DYVLSCILGN	QAESNNWQEL
	750	760	770	780	790
mouse	LGRLCLIDRL	LLEFPAEFYP	HIVSTDVSQA	EPVEIRYKKL	LSLLTFALQS
human	LGRLCLIDRL	LLEFPAEFYP	HIVSTDVSQA	EPVEIRYKKL	LSLLTFALQS
	800	810	820	830	840
mouse	IDNSHSMVGK	LSRRIYLSSA	RMVTAVPAVF	SKLVTMLNAS	GSTHFTRMRR
human	IDNSHSMVGK	LSRRIYLSSA	RMVTAVPAVF	SKLVTMLNAS	GSTHFTRMRR
	850	860	870	880	890
mouse	RLMAIADEVE	IAEVIQLGVE	DTVDGHQDSL	QAVAPTSCLE	NSSLEHTVHR
human	RLMAIDAEVE	IAEVIQLGVE	DTVDGHQDSL	QALAPASCLE	NSSLEHTVHR
	900	910	920	930	940
mouse	EKTGKGLSAT	RLSASSEDIS	DRLAGVSVGL	PSSTTTEQPK	PAVQTKGRPH
human	EKTGKGLSAT	RLSASSEDIS	DRLAGVSVGL	PSSTTTEQPK	PAVQTKGRPH
	950	960	970	980	990
mouse	SQCLNSSPLS	HAQLMFPAPS	APCSSAPSVP	DISKHRPQAF	VPCKIPSASP
human	SQCLNSSPLS	HAQLMFPAPS	APCSSAPSVP	DISKHRPQAF	VPCKIPSASP
	1000	1010	1020	1030	1040
mouse	QTQRKFSLQF	QRNCSEHRDS	DQLSPVFTQS	RPPSPSNIHR	PKPSRPVPGS
human	QTQRKFSLQF	QRNCSEHRDS	DQLSPVFTQS	RPPSPSNIHR	PKPSRPVPGS
	1050	1060	1070	1080	1090
mouse	TSKLGDATKS	SMTLDLGSAS	RCDDSFGGGG	NSGNAVIPSD	ETVFTPVEDK
human	TSKLGDATKS	SMTLDLGSAS	RCDDSFGGGG	NSGNAVIPSD	ETVFTPVEDK
	1100	1110	1120	1130	1140
mouse	CRLDVNTELN	SSIEDLLEAS	MPSSDTTVTF	KSEVAVLSPE	KAENDDTYKD
human	CRLDVNTELN	SSIEDLLEAS	MPSSDTTVTF	KSEVAVLSPE	KAENDDTYKD
	1150	1160	1170	1180	1190
mouse	DVNHNQKCKE	KMEAE ^{EEEE} EAL	AIAMAMSASQ	DALPIVPQLQ	VENGEDI ^{IIII}
human	DVNHNQKCKE	KMEAE ^{EEEE} EAL	AIAMAMSASQ	DALPIVPQLQ	VENGEDI ^{IIII}
	1200	1210	1220	1230	1240
mouse	QQDTPETLPG	HTKAKQPYRE	DAEWLKGQQI	GLGAFSSCYQ	AQDVGTGTLM
human	QQDTPETLPG	HTKAKQPYRE	DAEWLKGQQI	GLGAFSSCYQ	AQDVGTGTLM
	1250	1260	1270	1280	1290
mouse	AVKQVTYVRN	TSSEQEEVVE	ALREEIRMMG	HLNHPNIIRM	LGATCEKSNY
human	AVKQVTYVRN	TSSEQEEVVE	ALREEIRMM <u>S</u>	HLNHPNIIRM	LGATCEKSNY

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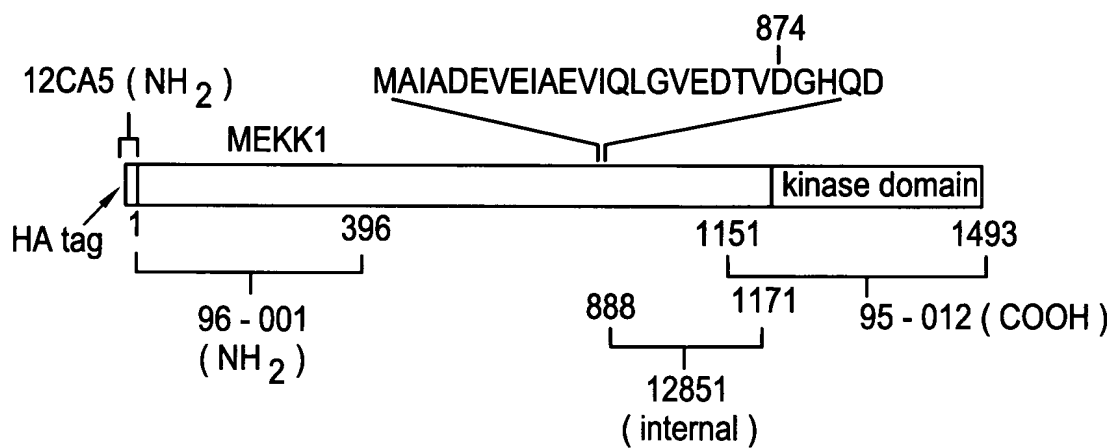


FIG.3C

	1300	1310	1320	1330	1340
mouse	NLFIEWMAGG	SVAHLLSKYG	AFKESVVINY	TEQLLRGLSY	LHENQIIHRD
human	NLFIEWMAGG	SVAHLLSKYG	AFKESVVINY	TEQLLRGLSY	LHENQIIHRD
	1350	1360	1370	1380	1390
mouse	VKGANLLIDS	TGQRLRIADF	GAAARLASKG	TGAGEFQGQL	LGTIAFMAPE
human	VKGANLLIDS	TGQRLRIADF	GAAARLASKG	TGAGEFQGQL	LGTIAFMAPE
	1400	1410	1420	1430	1440
mouse	VLRGQYGRS	CDVWSVGCAI	IEMACAKPPW	NAEKHSNHLA	LIFKIASATT
human	VLRGQYGRS	CDVWSVGCAI	IEMACAKPPW	NAEKHSNHLA	LIFKIASATT
	1450	1460	1470	1480	1490
mouse	APSIPSHLSP	GLRDVA V RCL	ELQPQDRPPS	RELLKHPVFR	TIW*
human	APSIPSHLSP	GLRDVA L RCL	ELQPQDRPPS	RELLKHPVFR	TIW*

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FIG.4

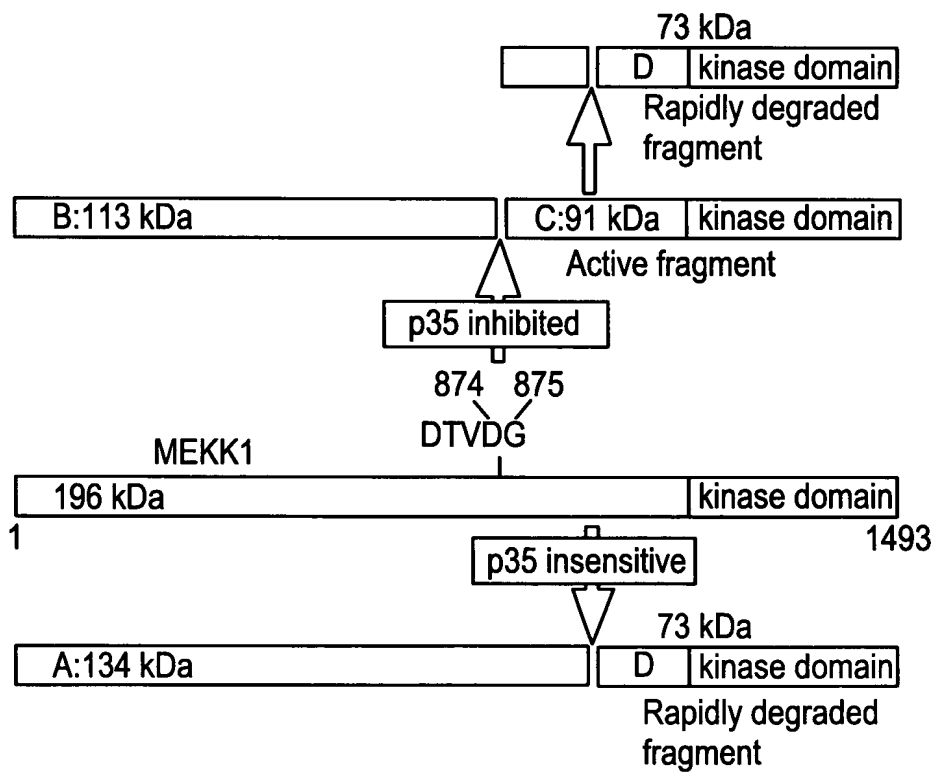


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FIG.5



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FIG. 7A

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10      20      30      40      50      60
MAAAAGDRASSSGFFGAAAASPEAGGGGGGGGALQGSGAPAAGAAGLLREPGSAGRERAD
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
MAAAAGDRASSSGFFGAAAASPEAGGGG--GALQGSGAPAAGA-GLLRETGSAGRERAD
10      20      30      40      50

70      80      90      100     110     120
WRRRHVRKVRSVELDQLPEQPLFLAAASPPCPSTSPSPADAAAGASRFQPAAGPPPPG
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
WRRQQLRKVRSVELDQLPEQPLFLTA-SPPCPSTSPSPADAAAGASGFQPAAGPPPPG
60      70      80      90      100     110

130     140     150     160     170     180
AASRCGSHSAELAAARDSGARSPAGAEPPSAAAPSGREMEKTLKGLHKMEDRPEERMI
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
AASRCGSHSAELAAARDSGARSPAGAEPPSAAAPSGREMEKTLKGLHKMDDRPEERMI
120     130     140     150     160     170

190     200     210     220     230     240
REKLKATCMPAWKHEWLERRNRRGPVVVKPIPIKGDGSEVNNLAAEPQEGEQAGSAAPAP
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
REKLKATCMPAWKHEWLERRNRRGPVVVKPIPIKGDGSEMSNLAELQEGEQAGSAAPAP
180     190     200     210     220     230

250     260     270     280     290     300
KGRRSPSPGSSPSGRSVKPESPGVRRKRVSVPVFFQSGRITPPRRAPSPDGFSPYSPEETS
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
KGRRSPSPGSSPSGRSGKPESPGVRRKRVSVPVFFQSGRITPPRRAPSPDGFSPYSPEETS
240     250     260     270     280     290

310     320     330     340     350     360
RRVNKVMRARLYLLQQIGPNSFLIGGDSPDNKYRVFIGPQNCSCGRGAFCIHLLFVMLRV
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
RRVNKVMRARLYLLQQIGPNSFLIGGDSPDNKYRVFIGPQNCSCGRGTFCIHLLFVMLRV
300     310     320     330     340     350

370     380     390     400     410     420
FQLEPSDPMWLWRKTLKNFEVESLFQKYHSRRSSRIKAPSRNTIQKFVSRMSNSHTLSSSS
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
FQLEPSDPMWLWRKTLKNFEVESLFQKYHSRRSSRIKAPSRNTIQKFVSRMSNCHTLSSSS
360     370     380     390     400     410

430     440     450     460     470     480
TSTSSSENSIKDEEEQMCPICLLGMLDEESLTVCEDGCRNKLHHHCMSIWAEECRRNREP
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
TSTSSSENSIKDEEEQMCPICLLGMLDEESLTVCEDGCRNKLHHHCMSIWAEECRRNREP
420     430     440     450     460     470

490     500     510     520     530     540
LICPLCRSKWRSHDFYSHELSSPVESPASLRAVQQPSSPQQPVAGSQRRNQESSFNLTHF
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
LICPLCRSKWRSHDFYSHELSSPVDSPSLRGVQQPSSPQQPVAGSQRRNQESNFNLTHT
480     490     500     510     520     530

550     560     570     580     590     600
GTQQIPSAYKDLAEPWIQVFGMELVGCLFSRNWNVREMLRRLSHDVSGALLLANGESTG
::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::
GTQQIPPAYKDLAEPWIQAFGMELVGCLFSRNWNVREMLRRLSHDVSGALLLANGESTG
540     550     560     570     580     590

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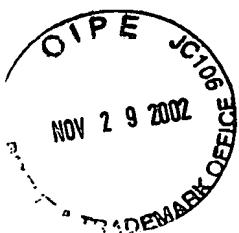


FIG. 7B

610 620 630 640 650 660
NSGGGSGGSL SAGAASGSSQPSISGDVVEACCSVLSIVCADPVYKVYVAALKTLRAMLVY
.....
TSGGGSGGSL SAGAASGSSQPSISGDVVEAFCSVLSIVCADPVYKVYVAALKTLRAMLVY
600 610 620 630 640 650

670 680 690 700 710 720
TPCHSLAERIKLQRLLRPVVDITILVKCADANSRTSOLSISTVLELCKGQAGELAVGREIL
.....
TPCHSLAERIKLQRLLRPVVDITILVKCADANSRTSOLSISTLLELCKGQAGELAVGREIL
660 670 680 690 700 710

730 740 750 760 770 780
KAGSIGVGGVDYVLSCILGNQAESNNWQELLGRLCLIDRLLLEFPAEFYPHIVSTDVVSQA
.....
KAGSIGVGGVDYVLSCILGNQAESNNWQELLGRLCLIDRLLLEISAEFYPHIVSTDVVSQA
720 730 740 750 760 770

790 800 810 820 830 840
EPVEIRYKKLLSLLTFALQSIDNSHSMVGKLSRRIYLSSARMVTAVPAVFSKLVTMLNAS
.....
EPVEIRYKKLLSLLAFALQSIDNSHSMVGKLSRRIYLSSARMVTTVPPLFSKLVTMLNAS
780 790 800 810 820 830

850 860 870 880 890 900
GSTHFTMRRLMAIADEVEIAEVIQLGVEDTVDGHQDSLQAVAPTSCLENSSSLEHTVHR
.....
GSSHFMRRRLMAIADEVEIAEVIQLGSEDTLDGQDSSQALAPPRYPSSSLEHTAHV
840 850 860 870 880 890

910 920 930 940 950 960
EKTGKGLSATRLSASSEDISDRLAGVSVGLPSSTTTEQPKPAVQTKGRPHSQCLNSSPLS
.....
EKTGKGLKATRLSASSEDISDRLAGVSVGLPSSATTEQPKPTVQTKGRPHSQCLNSSPLS
900 910 920 930 940 950

970 980 990 1000 1010
HAQLMFPAISAPCSSAPSVP-----DISKHRPQAFVPCCKIPSPASPQTQRKFSLQFQRNCS
.....
PPQLMFPAISAPCSSAPSVPAGSVTDASKHRPRAFPVPCCKIPSPASPQTQRKFSLQFQRTCS
960 970 980 990 1000 1010

1020 1030 1040 1050 1060 1070
EHRDSQDLSPVFTQSRPPSSNIHRPKPSRPVPGSTSKLGDATKSSMTLDLGSASRCDDS
.....
ENRDSEKLSPVFTQSRPPSSNIHRAKASRPVPGSTSKLGDASKNSMTLDLNSASQCDDS
1020 1030 1040 1050 1060 1070

1080 1090 1100 1110 1120 1130
FGGGGNSGNAVIPSDETFTVFTVEDKCRLDVNTLNSSIEDLLEASMPSSDTTVTFKSEVA
.....
FGSGNSGSAVIPSEETAFTPAEDKCRLDVNPENLNSSIEDLLEASMPSSDTTVTFKSEVA
1080 1090 1100 1110 1120 1130

1140 1150 1160 1170 1180 1190
VLSPEKAENDDTYKDDVNHQKCKEKEAEAEALAIAMAMSASQDALPIVPQLQVENGE
.....
VLSPEKAESDDTYKDDVNHQKCKEKEAEAEALAIAMAMSASQDALPIVPQLQVENGE
1140 1150 1160 1170 1180 1190

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FIG.7C



FIG.8A

rat
mouse
MAAAAGDRASSSGFPGAAAASPEA---GGGGGALQGSGAPAAGA-GLLRETGSAGRERAD
MAAAAGDRASSSGFPGAAAASPEAGGGGGGGGALQGSGAPAAGAAGLLREPGSAGRERAD

rat
mouse
WRRQQLRKVRSVELDQLPEQPLFL-TASPPCPSTSPSPPEPADAAAGASGFQPAAGPPPPG
WRRRHVRKVRSVELDQLPEQPLFLAAASPPCPSTSPSPPEPADAAAGASRFQPAAGPPPPG

rat
mouse
AASRCGSHSAELAAARD SGARSPAGAEPPSAAAPSGREMNKETLKGHLHKMDRPEERMI
AASRCGSHSAELAAARD SGARSPAGAEPPSAAAPSGREMNKETLKGHLHKMEDRPEERMI

rat
mouse
REKLKATCMPAWKHEWLERNRKGPVVVKPIPIKGDGSEMSNLAAELQEGEQAGSAAPAP
REKLKATCMPAWKHEWLERNRGRGPVVVKPIPIKGDGSEVNNLAAEPQEGEQAGSAAPAP

rat
mouse
KGRRSPSPGSSPSGRSGKPESPGVRRKRVSPVPFQSGRITPPRRAPSPDGFSPYSPEETS
KGRRSPSPGSSPSGRSVKPESPGVRRKRVSPVPFQSGRITPPRRAPSPDGFSPYSPEETS

rat
mouse
RRVNKVMRRLYLLQQIGPNSFLIGGDS PDNKYRVFIGPQNCSCGRGTFCIHLLFVMLRV
RRVNKVMRRLYLLQQIGPNSFLIGGDS PDNKYRVFIGPQNCSCGRGAFCIHLLFVMLRV

rat
mouse
FQLEPSDPMLWRKTLKNFEVESLFQKYHSRRSSRIKAPSRNTIQKFVSRMSNCHTLSSSS
FQLEPSDPMLWRKTLKNFEVESLFQKYHSRRSSRIKAPSRNTIQKFVSRMSNSHTLSSSS

rat
mouse
human
TSTSSSENSIKDEEEQMCPICLLGMLDEESLTVCEDGCRNKLHHHCMSIWAEECRRNREP
TSTSSSENSIKDEEEQMCPICLLGMLDEESLTVCEDGCRNKLHHHCMSIWAEECRRNREP
NKLHHHCMSIWAEECRRN P

rat
mouse
human
LICPLCRSKWRSHDFYSHELSSPVDSP TSLRGVQQPSSPQQPVAGSQRRNQESNFNLTHTY
LICPLCRSKWRSHDFYSHELSSPVESPASLRAVQQPSSPQQPVAGSQRRNQESSFNLTHTF
LICPLCRS WRSHDFYSHELSSPVDSPSSL Q V HPLAGS RRNQESNFNLTHTY

rat
mouse
human
GTQQIPPAYKDLAEPWIAFGMELVGCLFSRNWNVREMA LRRLSHDVS GALLLANGESTG
GTQQIPSAKDLAEPWIQVFGMELVGCLFSRNWNVREMA LRRLSHDVS GALLLANGESTG
GTQQIPPAYKDLAEPWIQVFGMELVGCLFSRNWNVREMA LRRLSHDVS GALLLANGESTG

rat
mouse
human
TSGGGSGGSLSAGAASGSSQPSISGDVVEAFCSVLSIVCADPVYKVYVAALKTLRAMLVY
NSGGGGSGGSLSAGAASGSSQPSISGDVVEACCSVLSIVCADPVYKVYVAALKTLRAMLVY
NSGGGGSGSSPSGGATSG SQTSGSDVVEACC

rat
mouse
human
TPCHSLAERIKLQRLLRPVVD TILVKCADANSRTS QLSISTLLELCKGQAGELAVGREIL
TPCHSLAERIKLQRLLRPVVD TILVKCADANSRTS QLSISTVLELCKGQAGELAVGREIL

rat
mouse
human
KAGSIGVGGVDYVLS CILGNQAESNNWQELLGRCLIDRLLEISAEFYPHIVSTDVSQA
KAGSIGVGGVDYVLS CILGNQAESNNWQELLGRCLIDRLLEFPAEFYPHIVSTDVSQA
PAEFYPHIVSTDVSQA

rat
mouse
human
EPVEIRYKKLLSLLAFALQSIDNSHSMVGKLSR----RIYLSSARMVTTVPPLFSKLVTM
EPVEIRYKKLLSLLTFALQSIDNSHSMVGKLSR----RIYLSSARMVTAVPAVFSKLVTM
EPVEIRYKKLLSLL FA K ID SHSMVG SR DISLLCYDDGRSAVCFPSW PC

rat
mouse
human
LSAGSSSHFARMRRRLMAIADEVEIAEVIQLGSED TLDGQQDSSQALAPPRYPRESSLEH
LNAGSTHFTMRMRRLMAIADEVEIAEVIQLGVEDTVDGHQDSLQAVAPTSCLENSLEH
LMLLGSTHFTMRMRRLMAIADEVEIAEVIQLGEVDTVDGHQDSLRLAPASCRENSLEH

rat
mouse
human
TAHVEKTGKGLKATRLSASSEDISDRLAGVSVGLPSSATTEQPKPTVQTKGRPHSQCLNS
TVHREKTGKGLSATRLSASSEDISDRLAGVSVGLPSTTTTEQPKPAVQTKGRPHSQCLNS
TVHREKTGKGLSATRLSTSEEISDRLAGVSVGFPSSTTTTEQPKPAVQTKGRPHSQCLNS

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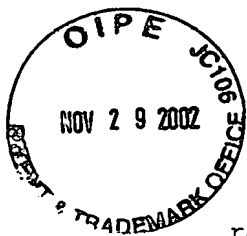


FIG.8B

rat	SPLSPPQLMFPAISAPCSSAPSVPAAGSVTDASKHRPRAFPVCKIPASASPQTQRKFSLQFQ
mouse	SPLSHAQLMFPAAPSAPCSSAPSVP-----DISKHRPQAFVPCKIPASASPQTQRKFSLQFQ
human	SPLSHAQLMFPAAPSAPCSSAP VP DISKHRPQAFVPCKILPHLPQTQRKFSLQFQ
rat	RTCSENRDSEKLSPVFTQSRPPSSNIHRAKASRPVPGSTSKLGDASKNSMTLDLNSASQ
mouse	RNCSEHRDSDQLSPVFTQSRPPSSNIHRPKPSRPVPGSTSKLGDATKSSMTLDLGSASR
human	RN EHRDQTQLSPVFTQSQDPTSSNIHRPKPDRPAPGSTSKLGDATKSSMTLDLGCQR
rat	CDDSFSGSGNSGSAVIPSEETAFTPAEDKCRLDVNPELNSSIEDLLEASMPSSDTTVTFK
mouse	CDDSFSGGGNSGNAVIPSETVFTVTPVEDKCRLDVNTELNSSIEDLLEASMPSSDTTVTFK
human	CDDSFSGGGNSGNAVIPSETVFTVTPVEDKCRLDVNTELNSSIEDLLEASMPSSDTTVTFK
rat	SEVAVLSPEKAESDDTYKDDVNHNQKCKEKEAEEEEALAIAMAMSASQDALPIVPQLQV
mouse	SEVAVLSPEKAENDDTYKDDVNHNQKCKEKEAEEEEALAIAMAMSASQDALPIVPQLQV
human	SEVAVLSPEKAENDDTYK VY
rat	ENGEDI III IQQDTPETLPGHTKANEPYREDTEWLKGQQIGLGAFFSSCYQAQDVGTTGLMA
mouse	ENGEDI III IQQDTPETLPGHTKAKQPYREDAEWLKGQQIGLGAFFSSCYQAQDVGTTGLMA
human	VIQQDTPETLPGHTKAKQPYREDAEWL G QIGLGHF
rat	VKQVTYVRNTSSEQEEVVEALREEIRMMSHLNHPNIIRMLGATCEKSNYNLFIEWMAGAS
mouse	VKQVTYVRNTSSEQEEVVEALREEIRMMGHLNHPNIIRMLGATCEKSNYNLFIEWMAGGS
human	EEIR MSHLNHP IIRMLG TGKKS NY LFIEWMAGGS
rat	VAHLLSKYGAFKESVVINYTEQLLRGLSYLHENQIIHRDVKGANLLIDSTGQRLRIADFG
mouse	VAHLLSKYGAFKESVVINYTEQLLRGLSYLHENQIIHRDVKGANLLIDSTGQRLRIADFG
human	VAHLLSKYGAF ESVVI YTEQ LRGLSYLHENQIIH DVKGANLLID-TG RLRIADFG
rat	AAARLASKGTGAGEFQGQLLGTIAFMAPEVLRGQQYGRSCDVWSVGCAIEMACAKPPWN
mouse	AAARLASKGTGAGEFQGQLLGTIAFMAPEVLRGQQYGRSCDVWSVGCAIEMACAKPPWN
human	AAA LASKG GAGEFQGQL GTIAFMAPEV RG QYGRSCDVWSVGCAIEMACAKPPWN
rat	AEKHSNHLALIFKIASATTAPSIPSHLSPGLRDVALRCLELQPQDRPPSRELLKHPVFRT
mouse	AEKHSNHLALIFKIASATTAPSIPSHLSPGLRDVAVRCLELQPQDRPPSRELLKHPVFRT
human	AEKHSNHLALIKKIASATTAPSIPSHLSPGLRNVALRCLELQPQDRPPSRELLKHPVFRT
rat	TW
mouse	TW
human	T

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